

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	20	"5723616"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 12:29
L2	3	"2002018319"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 14:07
L3	2	"20020018319"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 12:31
L4	2	"200218319"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 12:31
L5	0	"200200018319"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 12:31
L6	335	alzheimer and 514/278.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 14:13
L7	152	l6 and @py<"2003"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 14:10
L8	18	l7 and (growth adj hormone)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 14:13
L9	112	alzheimer and 514/570.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 14:13

## EAST Search History

L10	4	I9 and (secretase adj inhibitor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 14:14
S1	5	"2004080459"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 08:29
S2	5	"2004045592"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 08:35
S3	5	"2004031137"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 08:38
S4	4	"2003018543"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/04/24 12:26

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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 JAN 08 CHEMLIST enhanced with New Zealand Inventory of Chemicals  
NEWS 3 JAN 16 CA/CAPLUS Company Name Thesaurus enhanced and reloaded  
NEWS 4 JAN 16 IPC version 2007.01 thesaurus available on STN  
NEWS 5 JAN 16 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data  
NEWS 6 JAN 22 CA/CAPLUS updated with revised CAS roles  
NEWS 7 JAN 22 CA/CAPLUS enhanced with patent applications from India  
NEWS 8 JAN 29 PHAR reloaded with new search and display fields  
NEWS 9 JAN 29 CAS Registry Number crossover limit increased to 300,000 in multiple databases  
NEWS 10 FEB 15 PATDPASPC enhanced with Drug Approval numbers  
NEWS 11 FEB 15 RUSSIAPAT enhanced with pre-1994 records  
NEWS 12 FEB 23 KOREAPAT enhanced with IPC 8 features and functionality  
NEWS 13 FEB 26 MEDLINE reloaded with enhancements  
NEWS 14 FEB 26 EMBASE enhanced with Clinical Trial Number field  
NEWS 15 FEB 26 TOXCENTER enhanced with reloaded MEDLINE  
NEWS 16 FEB 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements  
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases  
NEWS 18 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format  
NEWS 19 MAR 16 CASREACT coverage extended  
NEWS 20 MAR 20 MARPAT now updated daily  
NEWS 21 MAR 22 LWPI reloaded  
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements  
NEWS 23 MAR 30 INPADOCDB will replace INPADOC on STN  
NEWS 24 APR 02 JICST-EPLUS removed from database clusters and STN  
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:11:18 ON 24 APR 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 08:11:45 ON 24 APR 2007

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STRUCTURE FILE UPDATES: 22 APR 2007 HIGHEST RN 931834-80-9

DICTIONARY FILE UPDATES: 22 APR 2007 HIGHEST RN 931834-80-9

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

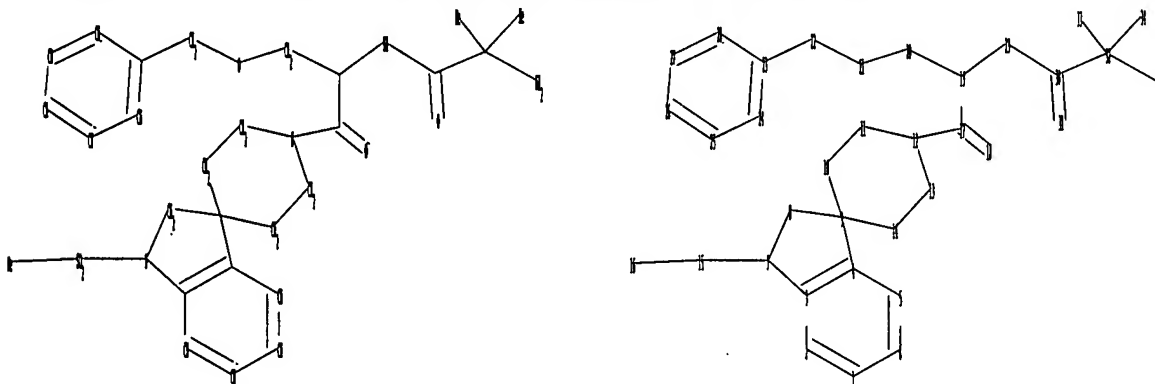
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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10560092A.str



chain nodes :

15 16 17 18 19 20 21 22 29 30 31 32 33 34 35

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 23 24 25 26 27 28

chain bonds :

7-15 12-17 15-16 17-18 17-19 19-20 19-29 20-21 21-22 22-23 29-30 30-31  
30-32 32-33 32-34 32-35

ring bonds :

1-2 1-6 2-3 3-4 3-7 4-5 4-9 5-6 7-8 8-9 9-10 9-14 10-11 11-12 12-13  
13-14 23-24 23-28 24-25 25-26 26-27 27-28

exact/norm bonds :

3-7 4-9 7-8 7-15 8-9 9-10 9-14 10-11 11-12 12-13 12-17 13-14 17-18  
19-29 29-30 30-31 32-35

exact bonds :

15-16 17-19 19-20 20-21 21-22 22-23 30-32 32-33 32-34

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 23-24 23-28 24-25 25-26 26-27 27-28

Match level :

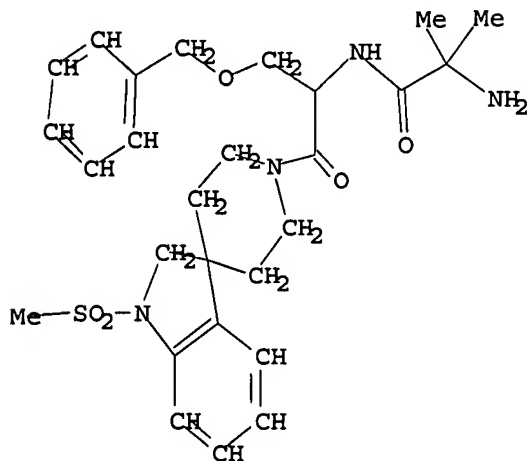
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11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS  
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom  
28:Atom 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

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FULL SCREEN SEARCH COMPLETED - 257 TO ITERATE

100.0% PROCESSED 257 ITERATIONS

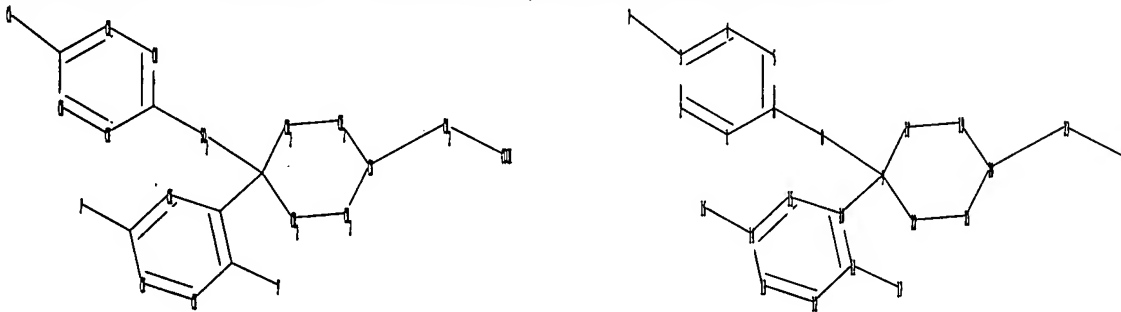
18 ANSWERS

SEARCH TIME: 00.00.01

L2 18 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\10560092B.str



chain nodes :

7 8 16 17 23 24

ring nodes :

1 2 3 4 5 6 9 10 11 12 13 14 15 18 19 20 21 22

chain bonds :

3-7 6-8 8-9 9-10 11-17 14-16 20-23 23-24  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 9-18 9-22 10-11 10-15 11-12 12-13 13-14 14-15  
 18-19 19-20 20-21 21-22  
 exact/norm bonds :  
 9-18 9-22 18-19 19-20 20-21 21-22  
 exact bonds :  
 3-7 6-8 8-9 9-10 11-17 14-16 20-23 23-24  
 normalized bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

Match level :

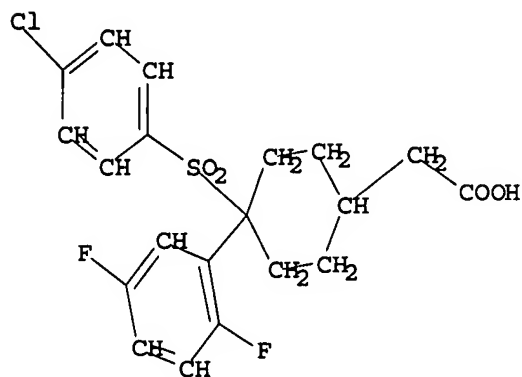
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 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:Atom 19:Atom  
 20:Atom 21:Atom 22:Atom 23:CLASS 24:CLASS

L3 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 13 full

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FULL SCREEN SEARCH COMPLETED - 744 TO ITERATE

100.0% PROCESSED 744 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L4 1 SEA SSS FUL L3

=> d 12 1

L2 ANSWER 1 OF 18 REGISTRY COPYRIGHT 2007 ACS on STN

RN 817203-70-6 REGISTRY

ED Entered STN: 20 Jan 2005

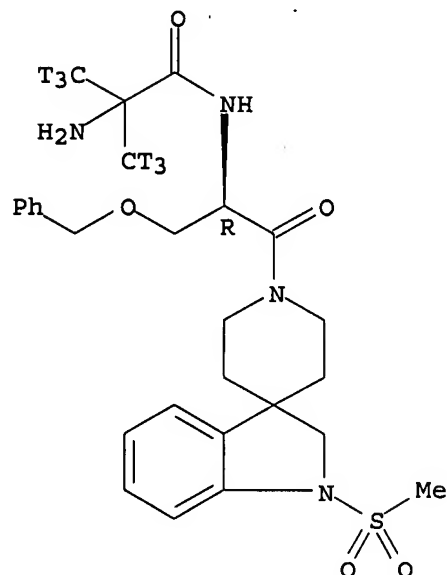
CN Propanamide-3,3,3-t3, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-(methyl-t3)-, monomethanesulfonate (9CI)  
 (CA INDEX NAME)

FS STEREOSEARCH

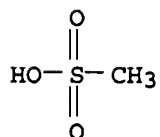
MF C27 H30 N4 O5 S T6 . C H4 O3 S

SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL  
 CM 1  
 CRN 817203-69-3  
 CMF C27 H30 N4 O5 S T6

Absolute stereochemistry.



CM 2  
 CRN 75-75-2  
 CMF C H4 O3 S

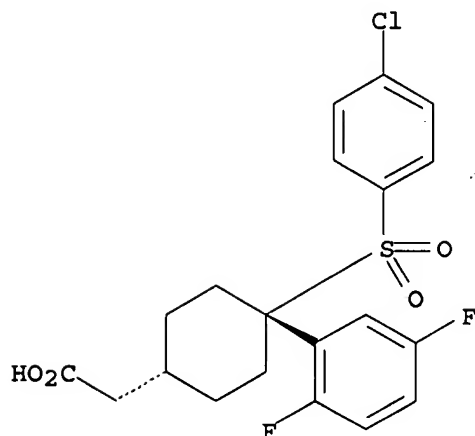


1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 471903-69-2 REGISTRY  
 ED Entered STN: 08 Nov 2002  
 CN Cyclohexaneacetic acid, 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-difluorophenyl)-, cis- (CA INDEX NAME)  
 OTHER NAMES:  
 CN [cis-4-(4-Chlorophenylsulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]acetic acid  
 FS STEREOSEARCH  
 MF C20 H19 Cl F2 O4 S  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
349.45	349.66

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 08:14:27 ON 24 APR 2007  
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FILE COVERS 1907 - 24 Apr 2007 VOL 146 ISS 18  
FILE LAST UPDATED: 23 Apr 2007 (20070423/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12 and 14  
136 L2  
5 L4  
L5 0 L2 AND L4  
  
=> s 12 and alzheimer  
136 L2  
44478 ALZHEIMER  
L6 15 L2 AND ALZHEIMER



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=> s 14 and alzheimer
      5 L4
      44478 ALZHEIMER
L7      4 L4 AND ALZHEIMER

=> dup rem 16 17
PROCESSING COMPLETED FOR L6
PROCESSING COMPLETED FOR L7
L8      19 DUP REM L6 L7 (0 DUPLICATES REMOVED)

=> s 12 and (neurodegenerative or cognitive or dementia)
      136 L2
      17788 NEURODEGENERATIVE
      19924 COGNITIVE
      13813 DEMENTIA
L9      15 L2 AND (NEURODEGENERATIVE OR COGNITIVE OR DEMENTIA)

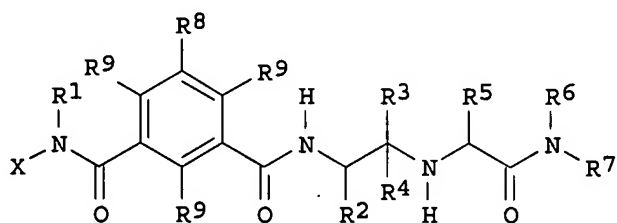
=> s 14 and (neurodegenerative or cognitive or dementia)
      5 L4
      17788 NEURODEGENERATIVE
      19924 COGNITIVE
      13813 DEMENTIA
L10     0 L4 AND (NEURODEGENERATIVE OR COGNITIVE OR DEMENTIA)

=> dup rem 18 19
PROCESSING COMPLETED FOR L8
PROCESSING COMPLETED FOR L9
L11     20 DUP REM L8 L9 (14 DUPLICATES REMOVED)

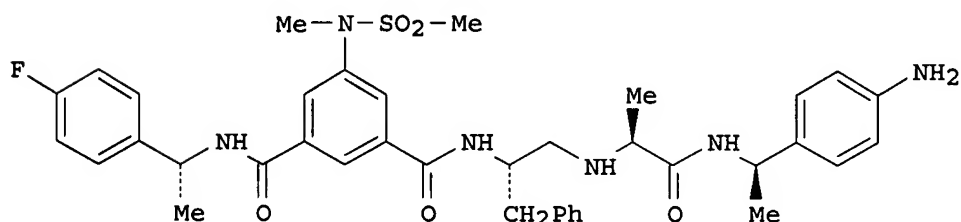
=> d ed abs ibib hitstr 1-
YOU HAVE REQUESTED DATA FROM 20 ANSWERS - CONTINUE? Y/(N):y

L11 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ED Entered STN: 16 Feb 2007
GI

```



I



II

AB Title compds. I [X = B-A-(L)<sub>i</sub>; B = alkylene with provisos; A = aryl, heteroaryl; L = H, halo, OH, etc.; i = 0-3; R<sub>1</sub> = H, alkyl, alkenyl, etc.; R<sub>2</sub> = alkyl, alkenyl, alkynyl, etc.; R<sub>3</sub>, R<sub>4</sub> = H, alkyl, F, etc.; R<sub>5</sub> = H, alkyl, alkenyl, etc.; R<sub>6</sub> = alkenyl, alkynyl, cycloalkyl, etc.; R<sub>7</sub> = H, alkyl, alkenyl, etc.] and their pharmaceutically acceptable salts and formulations were prepared For example, isophthalamide II was prepared from Me 2-aminoisophthalate in 9-steps. Compds. I are claimed useful as

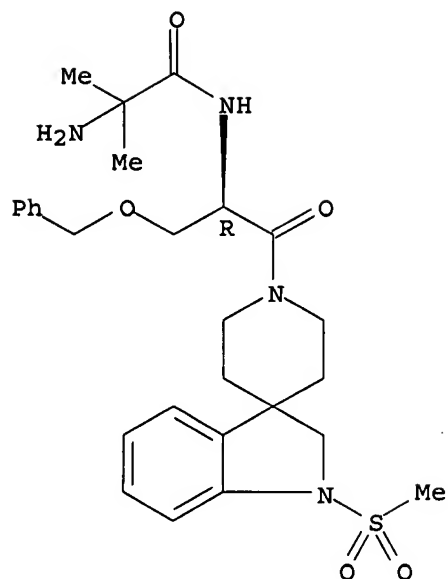
β-secretase inhibitors.

ACCESSION NUMBER: 2007:175504 HCAPLUS  
DOCUMENT NUMBER: 146:251613  
TITLE: Preparation of isophthalamides for the treatment of Alzheimer's disease  
INVENTOR(S): Fuchs, Klaus; Eickmeier, Christian; Heine, Niklas; Peters, Stefan; Dorner-Ciossek, Cornelia; Handschuh, Sandra; Nar, Herbert; Klinder, Klaus  
PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany; Boehringer Ingelheim Pharma GmbH & Co. KG  
SOURCE: PCT Int. Appl., 223pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017511	A2	20070215	WO 2006-EP65157	20060808
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: EP 2005-17475 A 20050811  
OTHER SOURCE(S): MARPAT 146:251613  
IT 159752-10-0, Ibutamoren mesylate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(medicaments with; preparation of isophthalamides for the treatment of Alzheimer's disease)  
RN 159752-10-0 HCAPLUS  
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)  
CM 1  
CRN 159634-47-6  
CMF C27 H36 N4 O5 S

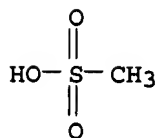
Absolute stereochemistry.



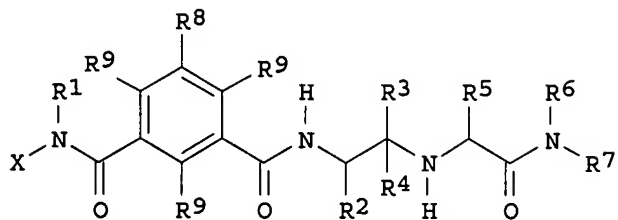
CM 2

CRN 75-75-2

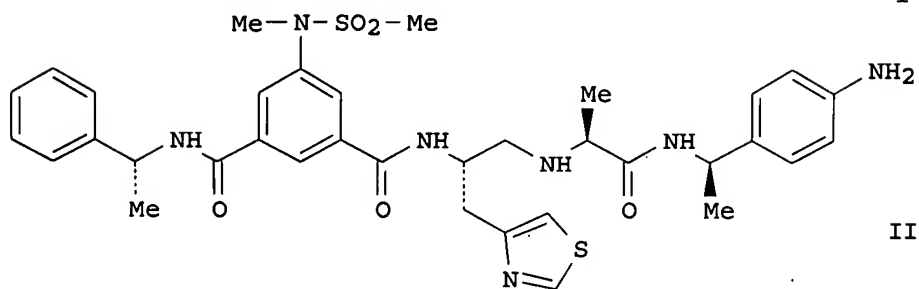
CMF C H4 O3 S



L11 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2  
 ED Entered STN: 16 Feb 2007  
 GI



I



II

AB Title compds. I [X = B-A-(L)i; B = alkylene with provisos; A = aryl, heteroaryl; L = H, halo, OH, etc.; i = 0-3; R1 = H, alkyl, alkenyl, etc.; R2 = alkyl, alkenyl, alkynyl, etc.; R3, R4 = H, alkyl, F, etc.; R5 = H, alkyl, alkenyl, etc.; R6 = alkenyl, alkynyl, cycloalkyl, etc.; R7 = H, alkyl, alkenyl, etc.] and their pharmaceutically acceptable salts and formulations were prepared. For example, the TFA salt of isophthalamide II was prepared from Me 2-aminoisophthalate in 5-steps. Compds. I are claimed useful as  $\beta$ -secretase inhibitors.

ACCESSION NUMBER: 2007:175501 HCAPLUS  
DOCUMENT NUMBER: 146:251612  
TITLE: Preparation of isophthalamides for the treatment of Alzheimer's disease  
INVENTOR(S): Heine, Niklas; Fuchs, Klaus; Eickmeier, Christian; Peters, Stefan; Dorner-Ciossek, Cornelia; Handschuh, Sandra; Nar, Herbert; Klinder, Klaus  
PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany; Boehringer Ingelheim Pharma GmbH & Co. KG  
SOURCE: PCT Int. Appl., 153pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017510	A2	20070215	WO 2006-EP65155	20060808
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RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: EP 2005-17478 A 20050811

OTHER SOURCE(S): MARPAT 146:251612

IT 159752-10-0, Ibutamoren mesylate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(medicaments with; preparation of isophthalamides for the treatment of Alzheimer's disease)

RN 159752-10-0 HCAPLUS

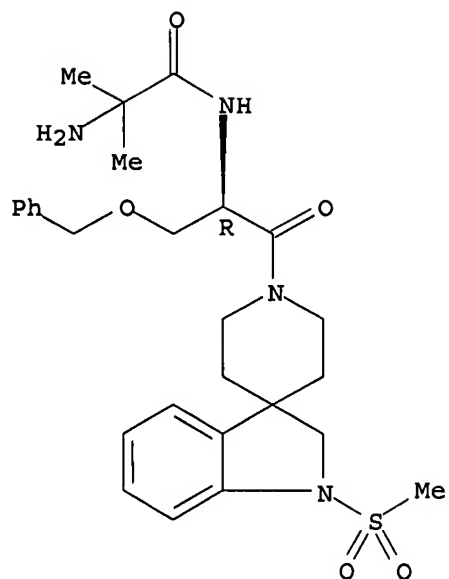
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6

CMF C27 H36 N4 O5 S

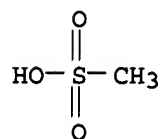
Absolute stereochemistry.



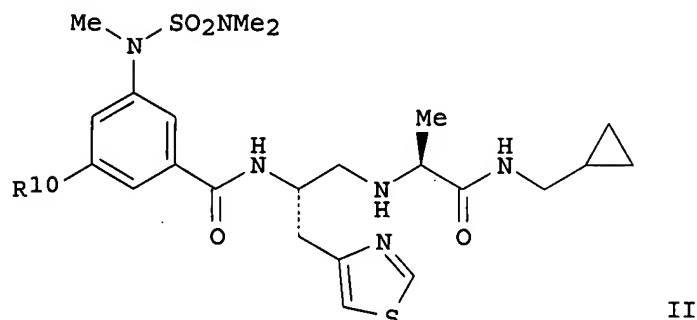
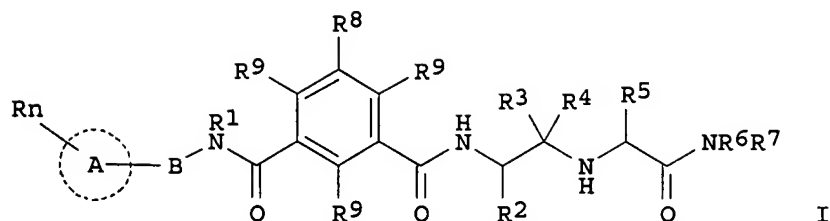
CM 2

CRN 75-75-2

CMF C H4 O3 S



L11 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3  
 ED Entered STN: 16 Feb 2007  
 GI



AB Title compds. [I; A = (substituted) (hetero)aryl; R = H, F, Cl, Br, iodo, OH, CO<sub>2</sub>H, CHO, cyano, NO<sub>2</sub>, CF<sub>3</sub>, etc.; n = 0-3; B = (substituted) alkylene; R<sub>1</sub> = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>2</sub> = (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, etc.; R<sub>3</sub>, R<sub>4</sub> = H, alkyl, F, CF<sub>3</sub>, CHF<sub>2</sub>, CH<sub>2</sub>F; R<sub>5</sub> = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>6</sub> = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>7</sub> = H, (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>8</sub> = H, F, Cl, Br, iodo, cyano, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>9</sub> = H, F, Cl, Br, iodo, (substituted) alkyl, etc.], salts, diastereomers, enantiomers, racemates, hydrates and solvates thereof were prepared. Thus, II (R<sub>10</sub> = CO<sub>2</sub>H) in CH<sub>2</sub>Cl<sub>2</sub> was treated with TBTU (O-(benzotriazol-1-yl)-N,N,N',N'-tertramethyluronium tetrafluoroborate), DIPEA (diisopropylethylamine), and 1-(pyrid-2-yl)ethylamine followed by stirring for 1 h at room temperature to give II (R<sub>10</sub> = 1-(pyrid-2-yl)ethylaminocarbonyl). Tested I inhibited  $\beta$ -secretase with IC<sub>50</sub> <30  $\mu$ M.

ACCESSION NUMBER: 2007:173914 HCAPLUS  
DOCUMENT NUMBER: 146:251873  
TITLE: Preparation of heteroaryl 1,2-ethylenediamines as  $\beta$ -secretase inhibitors for treatment of Alzheimer's disease  
INVENTOR(S): Fuchs, Klaus; Eickmeier, Christian; Heine, Niklas; Peters, Stefan; Dorner-Ciossek, Cornelia; Handschuh, Sandra; Nar, Herbert; Klinder, Klaus  
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.  
SOURCE: PCT Int. Appl., 141pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017509	A1	20070215	WO 2006-EP65154	20060808

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2005-17476 A 20050811

OTHER SOURCE(S): MARPAT 146:251873

IT 159752-10-0, Ibutamoren mesylate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coadministration; preparation of heteroaryl ethylenediamines as  
β-secretase inhibitors for treatment of Alzheimer's  
diseases)

RN 159752-10-0 HCAPLUS

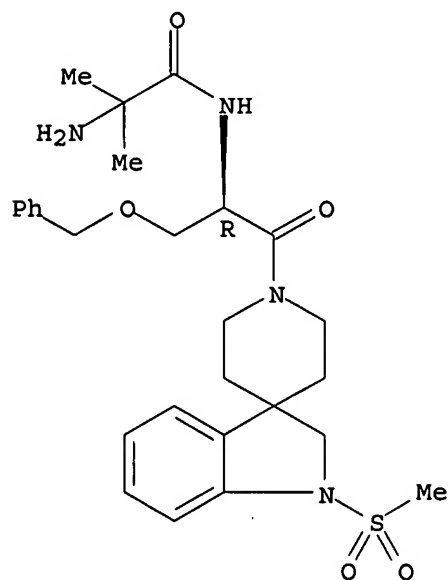
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6

CMF C27 H36 N4 O5 S

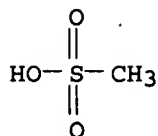
Absolute stereochemistry.



CM 2

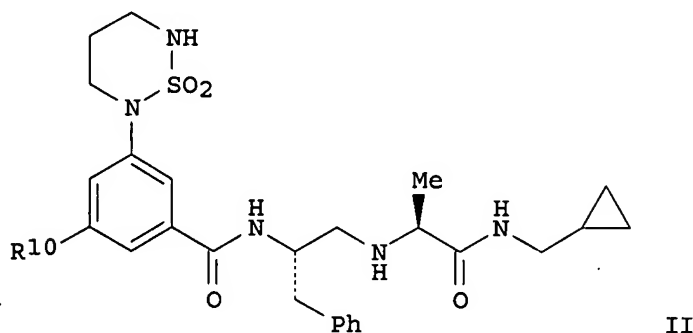
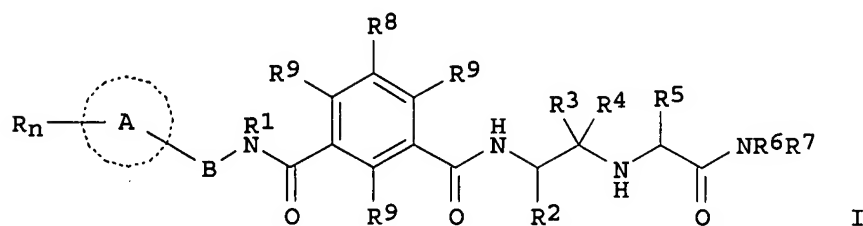
CRN 75-75-2

CMF C H4 O3 S



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 4  
ED Entered STN: 16 Feb 2007  
GI



AB Title compds. [I; A = (substituted) (hetero)aryl; R = H, F, Cl, Br, I, OH, CO<sub>2</sub>H, CHO, cyano, NO<sub>2</sub>, CF<sub>3</sub>, etc.; n = 0-3; B = (substituted) alkylene; R<sub>1</sub> = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>2</sub> = (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, etc.; R<sub>3</sub>, R<sub>4</sub> = H, alkyl, F, CF<sub>3</sub>, CHF<sub>2</sub>, CH<sub>2</sub>F; R<sub>5</sub> = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>6</sub> = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>7</sub> = H, (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>8</sub> = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, etc.; R<sub>9</sub> = H, F, Cl, Br, I, (substituted) alkyl, etc.), salts, diastereomers, enantiomers, racemates, hydrates and solvates thereof were prepd as β-secretase inhibitors (no data). Thus, II (R<sub>10</sub> = CO<sub>2</sub>H) in CH<sub>2</sub>Cl<sub>2</sub> was treated with TBTU (O-(benzotriazol-1-yl)-N,N,N',N'-tertramethyluronium tetrafluoroborate), DIPEA (N-Et<sub>3</sub>diisopropylamine), and 1-(1-methyl-1H-pyrazol-4-yl)ethylamine under ice-cooling followed by stirring for 5 h at room temperature to give II (R<sub>10</sub> = 1-(1-methyl-1H-pyrazol-4-yl)ethylaminocarbonyl).

ACCESSION NUMBER: 2007:173532 HCAPLUS  
DOCUMENT NUMBER: 146:251863  
TITLE: Preparation of substituted 1,2-ethylenediamines as β-secretase inhibitors for treatment of

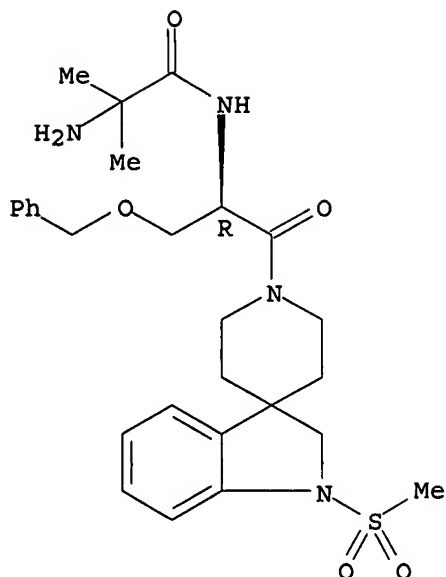


INVENTOR(S): Alzheimer's diseases  
Bickmeier, Christian; Fuchs, Klaus; Heine, Niklas;  
Peters, Stefan; Dorner-Ciossek, Cornelia; Handschuh,  
Sandra; Nar, Herbert; Klinder, Klaus  
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany;  
Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.  
SOURCE: PCT Int. Appl., 143pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017507	A1	20070215	WO 2006-EP65151	20060808
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: EP 2005-17477 A 20050811  
 OTHER SOURCE(S): MARPAT 146:251863  
 IT 159752-10-0, Ibutamoren mesylate  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of substituted ethylenediamines as  $\beta$ -secretase inhibitors  
 for treatment of Alzheimer's diseases)  
 RN 159752-10-0 HCAPLUS  
 CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro{3H-  
 indole-3,4'-piperidin}-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-  
 methyl-, methanesulfonate (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 159634-47-6  
 CMF C27 H36 N4 O5 S

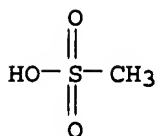
Absolute stereochemistry.



CM 2

CRN 75-75-2

CMF C H4 O3 S

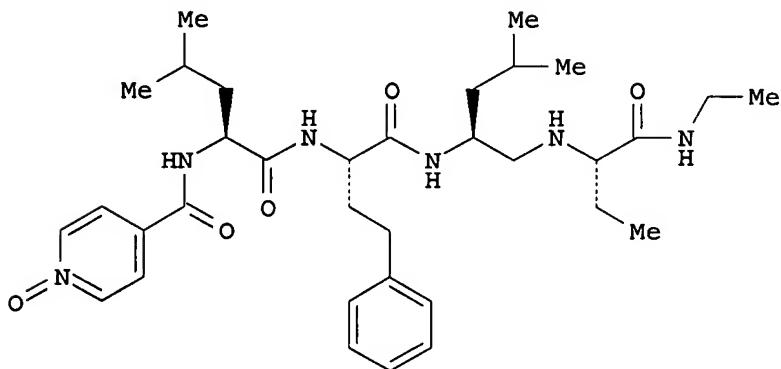


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 5

ED Entered STN: 09 Feb 2007

GI



I

AB The invention relates to compds. R1CONHCHR3CONR4CHR5CONHCHR6CH2NHCHR7CONHR  
2 [R1 is (hetero)alkyl, cycloalkyl, aryl, heteroaryl; R2 is alkyl,

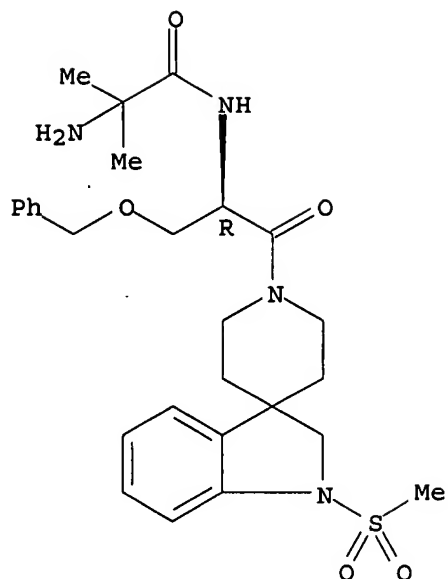
cycloalkyl, aryl, heterocyclyl, heteroaryl; R3, R6, R7 are alkyl, cycloalkyl, aryl; R4 is H, alk(en)(yn)yl, cycloalkyl; R5 is alkyl, cycloalkyl, aryl, heteroaryl; groups R1-R7 may be substituted], including pharmaceutically-acceptable salts, enantiomers, diastereomers, etc., for use in treating or preventing Alzheimer's disease and similar diseases. Thus, peptide I was prepared by the solid-phase method and used in the preparation of a pharmaceutical formulation.

ACCESSION NUMBER: 2007:150718 HCAPLUS  
DOCUMENT NUMBER: 146:229613  
TITLE: Preparation of peptide 1,2-ethanediamine derivatives for the treatment of Alzheimer's disease  
INVENTOR(S): Peters, Stefan; Eickmeier, Christian; Fuchs, Klaus; Stransky, Werner; Dorner-Ciossek, Cornelia; Kostka, Marcus; Handschuh, Sandra; Nar, Herbert; Bornemann, Klaus; Klinder, Klaus; Bauer, Margit  
PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany; Boehringer Ingelheim Pharma GmbH & Co. KG  
SOURCE: PCT Int. Appl., 107pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007014946	A1	20070208	WO 2006-EP64885	20060801
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

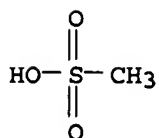
PRIORITY APPLN. INFO.: EP 2005-16866 A 20050803  
OTHER SOURCE(S): MARPAT 146:229613  
IT 159752-10-0, Ibutamoren mesylate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of peptide 1,2-ethanediamine derivs. for the treatment of Alzheimer's disease)  
RN 159752-10-0 HCAPLUS  
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)  
CM 1  
CRN 159634-47-6  
CMF C27 H36 N4 O5 S

Absolute stereochemistry.



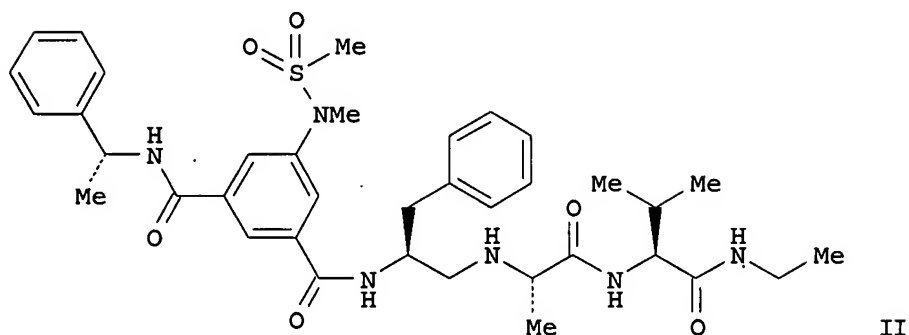
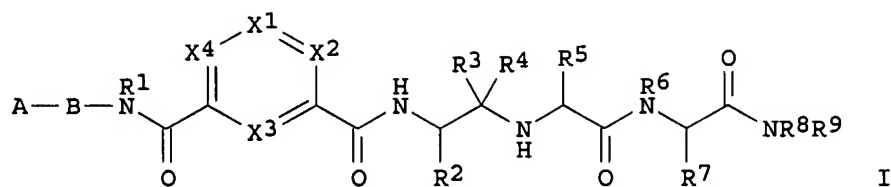
CM 2

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 6  
ED Entered STN: 06 Oct 2006  
GI



AB The invention relates to substituted 1,2-ethylenediamines I [A is aryl or heteroaryl which may be substituted; B is C1-4-alkylene or oxyalkylene; R1, R2, R5-R9 are H, (un)substituted alkyl, (hetero)aryl, etc. (but R2 is not H); R3, R4 are H, alkyl, F, CF3, CHF2, CH2F; X1-X4 are N, C or substituted carbon (0-3 of these groups are N)], including tautomers, diastereomers, enantiomers, and salts, and their use in the treatment of Alzheimer's disease (AD) and similar diseases. Thus, peptide II was prepared by a multistep sequence using reactants which include di-Me 5-aminoisophthalate, (R)-1-phenylethylamine, and protected amino acids. Compds. of the invention listed in a table have IC50 values < 30 µM in the β-secretase inhibition assay.

ACCESSION NUMBER: 2006:1041179 HCAPLUS  
DOCUMENT NUMBER: 145:419471  
TITLE: Preparation of peptide 1,2-ethylenediamine derivatives for the treatment of Alzheimer's disease  
INVENTOR(S): Eickmeier, Christian; Fuchs, Klaus; Peters, Stefan; Dorner-Ciossek, Cornelia; Heine, Niklas; Handschuh, Sandra; Klinder, Klaus; Kostka, Marcus  
PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany; Boehringer Ingelheim Pharma GmbH & Co. KG  
SOURCE: PCT Int. Appl., 325pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006103038	A1	20061005	WO 2006-EP2769	20060327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				

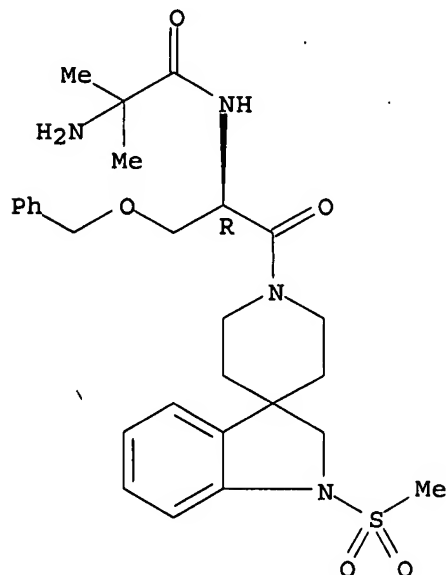
KG, KZ, MD, RU, TJ, TM  
 US 2006223759 A1 20061005 US 2006-278059 20060330  
 PRIORITY APPLN. INFO.: EP 2005-6939 A 20050330  
 OTHER SOURCE(S): MARPAT 145:419471

IT 159752-10-0, Ibutamoren mesylate  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of peptide ethylenediamine derivs. for treatment of  
 Alzheimer's disease)  
 RN 159752-10-0 HCAPLUS  
 CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-  
 indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-  
 methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

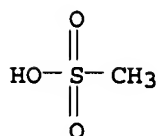
CRN 159634-47-6  
 CMF C27 H36 N4 O5 S

Absolute stereochemistry.



CM 2

CRN 75-75-2  
 CMF C H4 O3 S



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ED Entered STN: 18 Sep 2006  
 AB A review. Growth hormone (GH) is a pleiotropic hormone that is released  
 from the pituitary in a pulsatile manner to promote body growth and fat  
 mobilization and inhibit glucose utilization. The hormone interacts with  
 most tissues of the body and there are therefore numerous pathol.

endocrine and metabolic conditions that involve or are due to faulty GH secretion. Recombinant GH has been used to treat many of these conditions, but it must be administered by injection and is associated with a number of adverse events. Researchers have speculated that synthetic GH secretagogues (GHSs) may be more effective than recombinant GH in inducing physiol. pulsatile GH secretion and have focused on identifying novel GHSs to be used clin. One promising GHS is the orally active, nonpeptide spironindolinesulfonamide ibutamoren mesilate (MK-0677, L-163194). The agent has exhibited good oral activity and duration of action and was effective clin. for a number of GH-related indications. Ibutamoren is now in phase II development for the treatment of fibromyalgia, Alzheimer's disease and sarcopenia.

ACCESSION NUMBER: 2006:958466 HCAPLUS  
 DOCUMENT NUMBER: 146:308056  
 TITLE: Ibutamoren mesilate: growth hormone secretagogue  
 AUTHOR(S): Sorbera, L. A.; Bolos, J.; Serradell, N.  
 CORPORATE SOURCE: Prous Science, Barcelona, 08080, Spain  
 SOURCE: Drugs of the Future (2006), 31(5), 390-399  
 CODEN: DRFUD4; ISSN: 0377-8282  
 PUBLISHER: Prous Science  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English

IT 159752-10-0P, Ibutamoren mesylate  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Crescendo, MK 0677; ibutamoren mesilate synthesis, pharmacol., pharmacokinetics and efficacy in treatment of fibromyalgia, Alzheimer's disease and sarcopenia in patients)

RN 159752-10-0 HCAPLUS

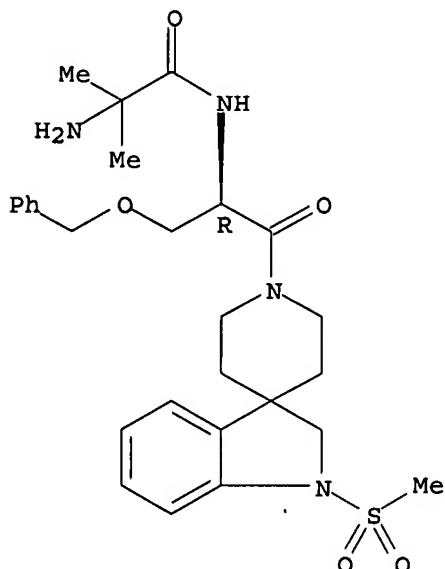
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6

CMF. C27 H36 N4 O5 S

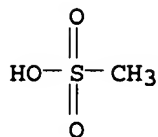
Absolute stereochemistry.



CM 2

CRN 75-75-2

CMF C H4 O3 S

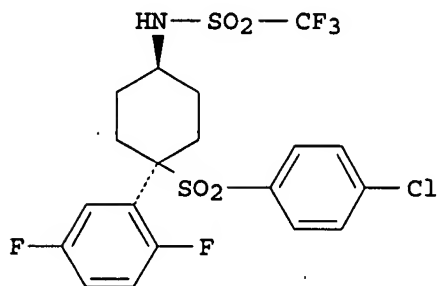


REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

ED Entered STN: 29 Nov 2005

GI



I

AB The protease  $\gamma$ -secretase plays a pivotal role in the synthesis of pathogenic amyloid- $\beta$  in Alzheimer's disease (AD). Here, we report a further extension to a series of cyclohexyl sulfone-based  $\gamma$ -secretase inhibitors which has allowed the preparation of highly potent compds. which also demonstrate robust A $\beta$ (40) lowering in vivo (e.g., compound I, MED 1 mg/kg p.o. in APP-YAC mice).

ACCESSION NUMBER: 2005:1251592 HCAPLUS

DOCUMENT NUMBER: 144:80566

TITLE: 4-Substituted cyclohexyl sulfones as potent, orally active  $\gamma$ -secretase inhibitors

AUTHOR(S): Churcher, Ian; Beher, Dirk; Best, Jonathan D.; Castro, Jose L.; Clarke, Earl E.; Gentry, Amy; Harrison, Timothy; Hitzel, Laure; Kay, Euan; Kerrad, Sonia; Lewis, Huw D.; Morentin-Gutierrez, Pablo; Mortishire-Smith, Russell; Oakley, Paul J.; Reilly, Michael; Shaw, Duncan E.; Shearman, Mark S.; Teall, Martin R.; Williams, Susie; Wrigley, Jonathan D. J.

CORPORATE SOURCE: Department of Medicinal Chemistry, The Neuroscience Research Centre, Merck Sharp and Dohme Research Laboratories, Harlow, Essex, CM20 2QR, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(2), 280-284

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

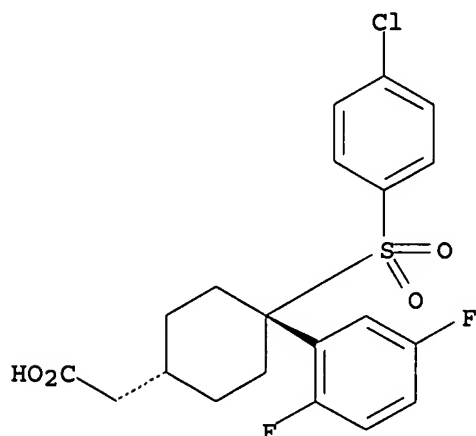
DOCUMENT TYPE: Journal

LANGUAGE: English



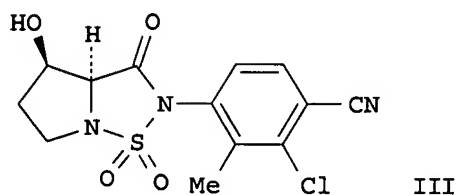
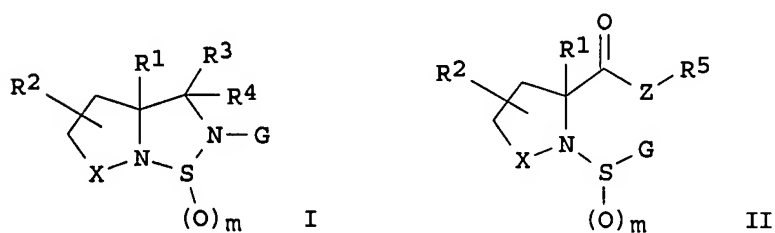
OTHER SOURCE(S): CASREACT 144:80566  
 IT 471903-69-2P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (cyclohexyl sulfones as  $\gamma$ -secretase inhibitors)  
 RN 471903-69-2 HCAPLUS  
 CN Cyclohexaneacetic acid, 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-difluorophenyl)-, cis- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 7  
 ED Entered STN: 26 Aug 2005  
 GI



AB Title compds. I or II [R1 = H, (un)substituted alkyl, alkenyl, etc.; R2 = H, halo, SR6, etc.; R3 and R4 independently = H, (un)substituted alkynyl, cycloalkyl, etc.; R5 = H, (un)substituted aryl, arylalkyl, etc.; R6 = H, CHF2, CF3, etc.; X = (CH2)n; G = (un)substituted aryl, heterocycle or heteroaryl; Z = O or NR7; R7 = H, (un)substituted alkyl, alkenyl, etc.; n and m independently = 1-2] and their pharmaceutically acceptable salts, are prepared and disclosed as modulators of androgen receptor. Thus, e.g., III was prepared by hydrolysis of (2S,3R)-1-(3-chloro-4-cyano-2-methyl-phenylsulfamoyl)-3-hydroxy-pyrrolidine-2-carboxylic acid Me ester (preparation given) followed by cyclization. The activity of I was evaluated in transactivation assays of a transfected reporter construct and using the endogenous androgen receptor of the host cells (no data). I as modulator of androgen receptor should prove useful in the treatment of neoplasm, Alzheimer's disease and obesity. Pharmaceutical compns. comprising I are disclosed.

ACCESSION NUMBER: 2005:902874 HCAPLUS  
DOCUMENT NUMBER: 143:248277  
TITLE: Preparation of sulfonylpyrrolidines as modulators of androgen receptor  
INVENTOR(S): Hamann, Lawrence H.; Bi, Yingzhi; Manfredi, Mark C.; Nirschl, Alexandra A.; Sutton, James C.  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
SOURCE: PCT Int. Appl., 91 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005077925	A1	20050825	WO 2005-US2834	20050202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

EP 1718626	A1	20061108	EP 2005-712320	20050202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				

PRIORITY APPLN. INFO.: US 2004-541869P P 20040204  
WO 2005-US2834 W 20050202

OTHER SOURCE(S): MARPAT 143:248277

IT 159752-10-0, MK-677

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(claimed co-drug; preparation of sulfonylpyrrolidines as modulators of androgen receptor)

RN 159752-10-0 HCAPLUS

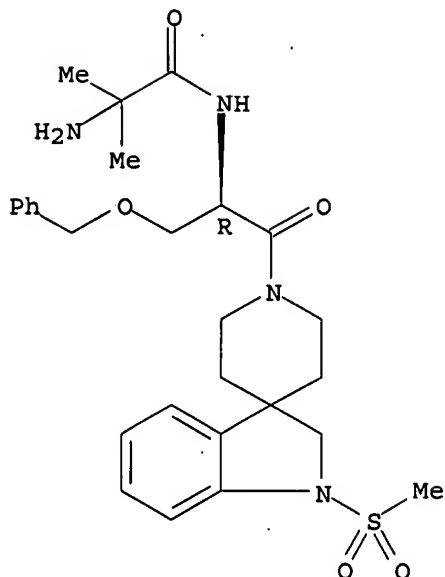
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6

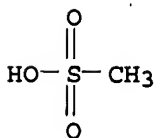
CMF C27 H36 N4 O5 S

Absolute stereochemistry.



CM 2

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 8  
ED Entered STN: 30 Jun 2005  
AB The invention provides the combination of a growth hormone secretagogue and a p38 kinase inhibitor for use in treatment or prevention of a disease associated with deposition of Aβ in the brain.  
ACCESSION NUMBER: 2005:564579 HCAPLUS  
DOCUMENT NUMBER: 143:71802  
TITLE: Growth hormone secretagogue-p38 kinase inhibitor combination for the treatment of Alzheimer's disease and related conditions  
INVENTOR(S): Castro Pineiro, Jose Luis  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 22 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058308	A2	20050630	WO 2004-GB5234	20041214
WO 2005058308	A3	20050915		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

GB 2003-29275

A 20031218

OTHER SOURCE(S):

MARPAT 143:71802

IT 159634-47-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

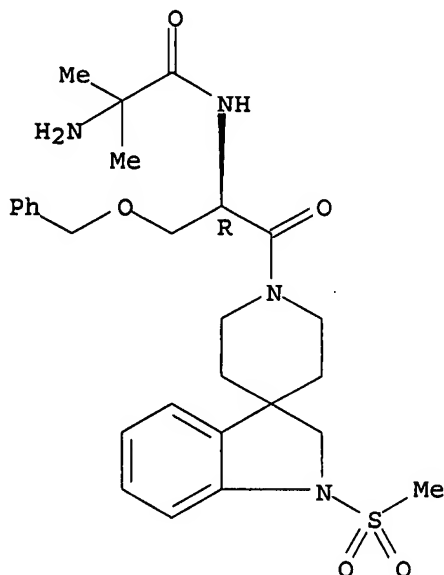
(Biological study); USES (Uses)

(growth hormone secretagogue-p38 kinase inhibitor combination for  
 treatment of Alzheimer's disease and related conditions)

RN 159634-47-6 HCAPLUS

CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-  
 indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-  
 methyl- (9CI) (CA INDEX NAME)

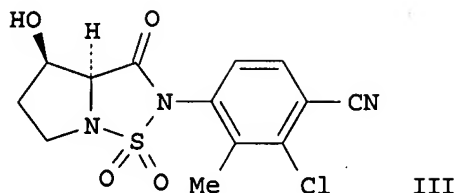
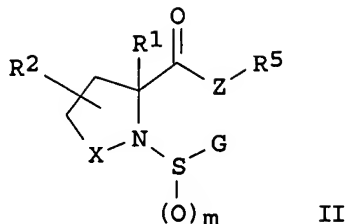
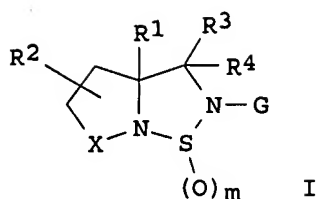
Absolute stereochemistry.



L11 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 9

ED Entered STN: 26 Aug 2005

GI



AB Title compds. I or II [R<sub>1</sub> = H, (un)substituted alkyl, alkenyl, etc.; R<sub>2</sub> = H, halo, SR<sub>6</sub>, etc.; R<sub>3</sub> and R<sub>4</sub> independently = H, (un)substituted alkynyl, cycloalkyl, etc.; R<sub>5</sub> = H, (un)substituted aryl, arylalkyl, etc.; R<sub>6</sub> = H, CHF<sub>2</sub>, CF<sub>3</sub>, etc.; X = (CH<sub>2</sub>)<sub>n</sub>; G = (un)substituted aryl, heterocycle or heteroaryl; Z = O or NR<sub>7</sub>; R<sub>7</sub> = H, (un)substituted alkyl, alkenyl, etc.; n and m independently = 1-2] and their pharmaceutically acceptable salts, are prepared and disclosed as modulators of androgen receptor. Thus, e.g., III was prepared by hydrolysis of (2S,3R)-1-(3-chloro-4-cyano-2-methylphenylsulfamoyl)-3-hydroxy-pyrrolidine-2-carboxylic acid Me ester (preparation given) followed by cyclization. The activity of I was evaluated in transactivation assays of a transfected reporter construct and using the endogenous androgen receptor of the host cells (no data). I as modulator of androgen receptor should prove useful in the treatment of neoplasm, Alzheimer's disease and obesity. Pharmaceutical compns. comprising I are disclosed.

ACCESSION NUMBER: 2005:904349 HCAPLUS  
DOCUMENT NUMBER: 143:248278  
TITLE: Preparation of sulfonylpyrrolidines as modulators of androgen receptor  
INVENTOR(S): Hamann, Lawrence G.; Bi, Yingzhi; Manfredi, Mark C.; Nirschl, Alexandra A.; Sutton, James C.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 35 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005187267	A1	20050825	US 2005-48439	20050201
PRIORITY APPLN. INFO.:			US 2004-541869P	P 20040204
OTHER SOURCE(S):	MARPAT 143:248278			
IT 159752-10-0				

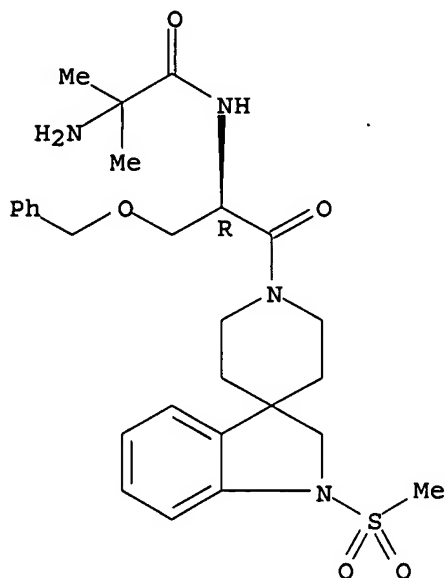
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(claimed co-drug; preparation of sulfonylpyrrolidines as modulators of androgen receptor)

RN 159752-10-0 HCAPLUS  
 CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

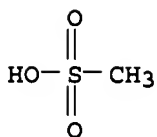
CRN 159634-47-6  
 CMF C27 H36 N4 O5 S

Absolute stereochemistry.

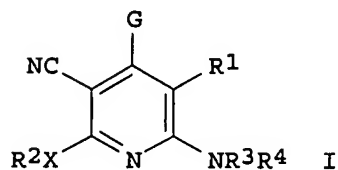


CM 2

CRN 75-75-2  
 CMF C H4 O3 S



L11 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 10  
 ED Entered STN: 19 Aug 2005  
 GI



AB A method is provided for treating androgen receptor-associated conditions, such as age-related diseases, e.g. sarcopenia, employing a compound I [R1 =

CN, H; X = O, S; R2 = (substituted) alkyl, (substituted) cycloalkyl, etc;  
 R3, R4 = H, (substituted) alkyl, etc.; G = (substituted) aryl,  
 (substituted) heteroaryl], or a pharmaceutically acceptable salt or  
 prodrug ester thereof. Preparation of selected I is described. I may be used  
 in combination with other agents.

ACCESSION NUMBER: 2005:824492 HCAPLUS  
 DOCUMENT NUMBER: 143:222525  
 TITLE: Method of using 3-cyano-4-arylpyridine derivatives as  
 modulators of androgen receptor function, preparation  
 thereof, and use with other agents  
 INVENTOR(S): Nirschl, Alexandra A.; Hamann, Lawrence G.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 25 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005182105	A1	20050818	US 2005-48437	20050201
PRIORITY APPLN. INFO.:			US 2004-541780P	P 20040204

OTHER SOURCE(S): MARPAT 143:222525

IT 159752-10-0, MK-677

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(cyanoarylpyridine derivative modulators of androgen receptor function,  
 preparation, and use with other agents)

RN 159752-10-0 HCAPLUS

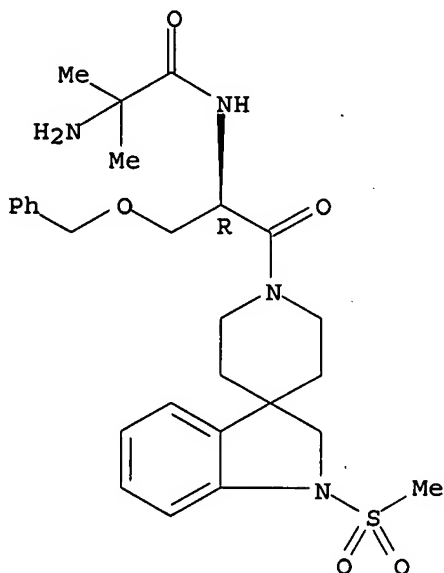
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-  
 indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-  
 methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6

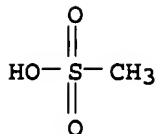
CMF C27 H36 N4 O5 S

Absolute stereochemistry.



CM 2

CRN 75-75-2  
CMF C H4 O3 S



L11 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN  
ED Entered STN: 08 Sep 2005  
AB GH-releasing peptides, including GHRP and morelin analogs, are claimed as neurite extension promoters for treatment of nerve system diseases, including dementia, memory disorder, and paralysis.  
ACCESSION NUMBER: 2005:975900 HCAPLUS  
DOCUMENT NUMBER: 143:242039  
TITLE: GH-releasing peptides as neurite extension promoters for treatment of nerve system diseases  
INVENTOR(S): Gomita, Hiroshi; Nikami, Kojiro; Shibata, Kazuhiko; Kano, Yoshio  
PATENT ASSIGNEE(S): Kaken Pharmaceutical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

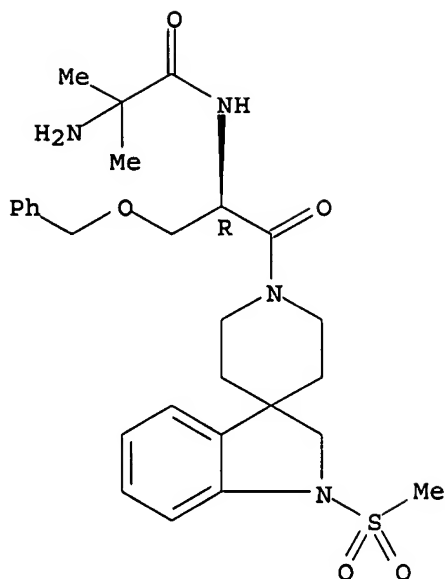
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	JP 2005239712	A	20050908	JP 2005-23536	20050131
PRIORITY APPLN. INFO.:				JP 2004-22778	A 20040130
IT	159752-10-0, MK 0677				
	RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(GH-releasing peptides as neurite extension promoters for treatment of nerve system diseases)				
RN	159752-10-0 HCAPLUS				
CN	Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)				

CM 1

CRN 159634-47-6  
CMF C27 H36 N4 O5 S

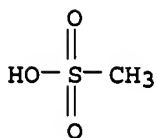
Absolute stereochemistry.





CM 2

CRN 75-75-2  
CMF C H4 O3 S



L11 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 11  
ED Entered STN: 23 Dec 2004  
AB There is disclosed the combination of a growth hormone secretagogue and at least one agent which modifies the production or processing of A $\beta$  in the brain, said at least one agent being selected from: (a) compds. which inhibit the secretion of A $\beta$ ; (b) compds. which selectively inhibit the secretion of the 1-42 isoform of A $\beta$ ; (c) compds. which inhibit the aggregation of A $\beta$ ; and (d) antibodies which selectively bind to A $\beta$ ; for use in treatment or prevention of a disease associated with deposition of A $\beta$  in the brain. The growth hormone secretagogue is especially N-[1(R)-[(1,2-dihydro-1-methanesulfonylspiro[3H-indole-3,4'-piperidin]-1'-yl)carbonyl]-2-(phenylmethoxy)ethyl]-2-amino-2-methylpropanamide. The amyloid modifier is especially R-flurbiprofen.

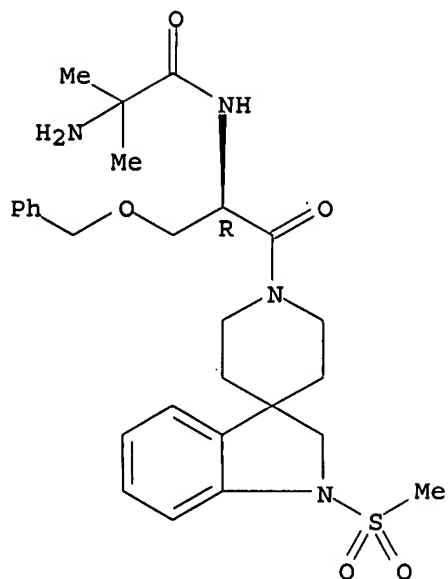
ACCESSION NUMBER: 2004:1124636 HCAPLUS  
DOCUMENT NUMBER: 142:49251  
TITLE: Growth hormone secretagogue combination with agent modifying production or processing of A $\beta$  in brain in treatment for Alzheimer's disease and related conditions

INVENTOR(S): Castro Pineiro, Jose Luis  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 34 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004110443	A1	20041223	WO 2004-GB2381	20040604
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004246849	A1	20041223	AU 2004-246849	20040604
CA 2528395	A1	20041223	CA 2004-2528395	20040604
EP 1638563	A1	20060329	EP 2004-736079	20040604
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1805746	A	20060719	CN 2004-80016539	20040604
JP 2006527244	T	20061130	JP 2006-516374	20040604
US 2006121034	A1	20060608	US 2005-560092	20051209
PRIORITY APPLN. INFO.:			GB 2003-13772	A 20030613
			WO 2004-GB2381	W 20040604
OTHER SOURCE(S):	MARPAT 142:49251			
IT	159752-10-0 159752-10-0D, salts			
RL:	BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)			
	(as growth hormone secretagogue; growth hormone secretagogue combination with agent modifying production or processing of A $\beta$ in brain in treatment for Alzheimer's disease and related conditions)			
RN	159752-10-0 HCAPLUS			
CN	Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)			
CM	1			
CRN	159634-47-6			
CMF	C27 H36 N4 O5 S			

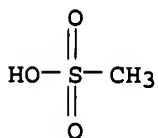
Absolute stereochemistry.



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 159752-10-0 HCAPLUS

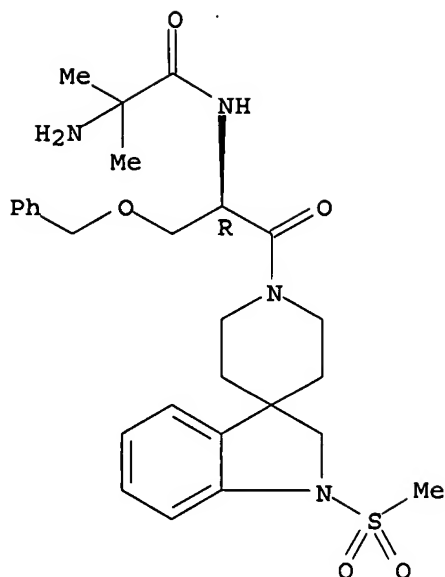
CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methanesulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6

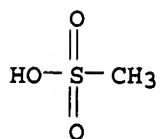
CMF C27 H36 N4 O5 S

Absolute stereochemistry.



CM 2

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 12  
ED Entered STN: 18 Oct 2004  
AB The invention discloses the treatment or prevention of diseases involving deposition of  $\beta$ -amyloid in the brain, e.g. Alzheimer's disease, via the combined administration of a growth hormone secretagogue and a PDE4 inhibitor.

ACCESSION NUMBER: 2004:857402 HCAPLUS  
DOCUMENT NUMBER: 141:325764  
TITLE: Growth hormone secretagogue-phosphodiesterase 4 inhibitor combination for the treatment of Alzheimer's disease  
INVENTOR(S): Castro Pineiro, Jose Luis  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 20 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087157	A2	20041014	WO 2004-GB1435	20040401
WO 2004087157	A3	20041118		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2004226698	A1	20041014	AU 2004-226698	20040401
CA 2521046	A1	20041014	CA 2004-2521046	20040401
CN 1764457	A	20060426	CN 2004-80008035	20040401
EP 1660086	A2	20060531	EP 2004-725099	20040401
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2006522084	T	20060928	JP 2006-506077	20040401
US 2006183764	A1	20060817	US 2005-552367	20051003
PRIORITY APPLN. INFO.:			GB 2003-7863	A 20030404
			WO 2004-GB1435	A 20040401

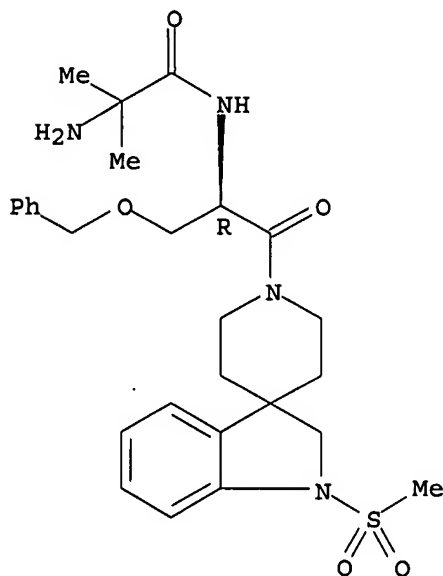
IT 159752-10-0 770710-32-2  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (growth hormone secretagogue-phosphodiesterase 4 inhibitor combination for treatment of Alzheimer's disease)

RN 159752-10-0 HCAPLUS  
 CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

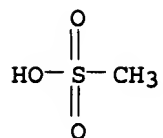
CRN 159634-47-6  
 CMF C27 H36 N4 O5 S

Absolute stereochemistry.



CM 2

CRN 75-75-2  
 CMF C H4 O3 S



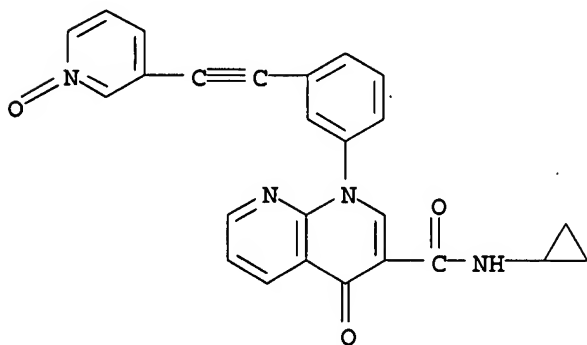
RN 770710-32-2 HCAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[(1-oxido-3-pyridinyl)ethynyl]phenyl]-4-oxo-, mixt. with 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methylpropanamide (9CI) (CA INDEX NAME)

CM 1

CRN 500355-52-2

CMF C25 H18 N4 O3

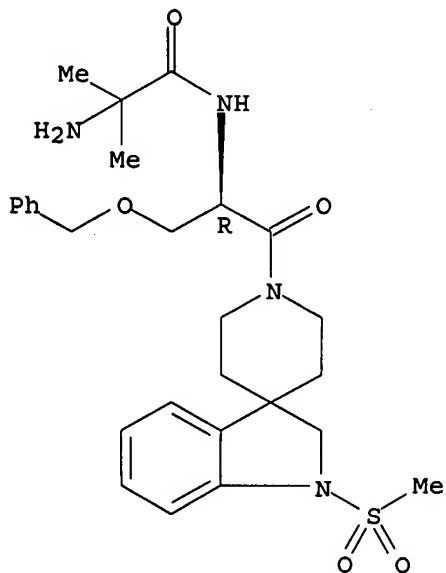


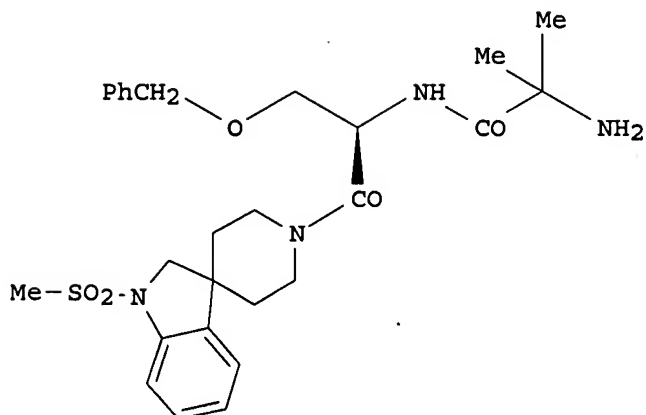
CM 2

CRN 159634-47-6

CMF C27 H36 N4 O5 S

Absolute stereochemistry.





I

AB The invention discloses the use of I, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for the treatment of age-related cognitive decline or mild cognitive impairment, in particular with a view to preventing or delaying the onset of Alzheimer's disease.

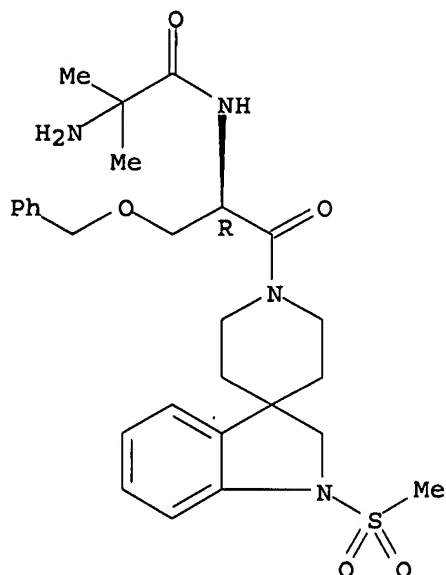
ACCESSION NUMBER: 2004:780537 HCAPLUS  
DOCUMENT NUMBER: 141:271591  
TITLE: Method using a methanesulfonylspiroindolepiperidine derivative for treating mild cognitive impairment and for preventing or delaying Alzheimer's disease  
INVENTOR(S): Shearman, Mark Steven; Turner, Mervyn  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK; Merck & Co. Inc.  
SOURCE: PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080459	A1	20040923	WO 2004-GB983	20040308
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004218871	A1	20040923	AU 2004-218871	20040308
CA 2518886	A1	20040923	CA 2004-2518886	20040308
EP 1605940	A1	20051221	EP 2004-718341	20040308
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
BR 2004008295	A	20060307	BR 2004-8295	20040308
CN 1794992	A	20060628	CN 2004-80006962	20040308
JP 2006520371	T	20060907	JP 2006-505929	20040308

NO 2005004714	A	20051116	NO 2005-4714	20051013
US 2006241133	A1	20061026	US 2006-549839	20060622
PRIORITY APPLN. INFO.:			US 2003-454589P	P 20030314
			WO 2004-GB983	A 20040308

IT 159634-47-6 159752-10-0  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (methanesulfonylspiroindolepiperidine derivative for treating mild  
 cognitive impairment and preventing or delaying Alzheimer's  
 disease)  
 RN 159634-47-6 HCAPLUS  
 CN Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-  
 indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-  
 methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



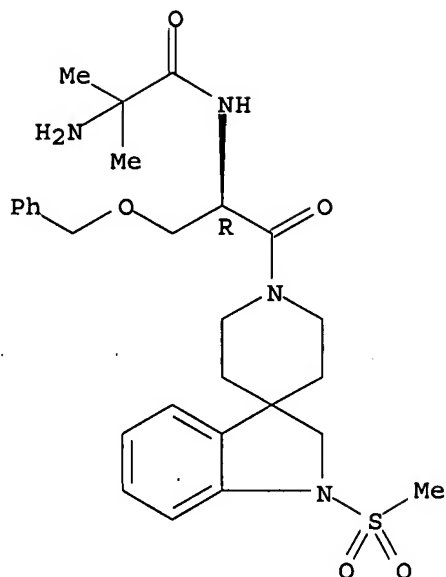
RN 159752-10-0 HCAPLUS  
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 indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-  
 methyl-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 159634-47-6  
 CMF C27 H36 N4 O5 S

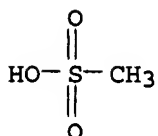
Absolute stereochemistry.





CM 2

CRN 75-75-2  
CMF C H4 O3 S



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 14

ED Entered STN: .04 Jun 2004

AB The invention discloses methods for promoting neurogenesis by contacting neuronal tissue with intracellular cAMP-elevating agents and intracellular calcium ion-elevating agents. Agents for promoting neurogenesis are also disclosed.

ACCESSION NUMBER: 2004:453015 HCAPLUS

DOCUMENT NUMBER: 141:17632

TITLE: Methods and agents elevating cAMP and calcium ion for increasing neurogenesis

INVENTOR(S): Bertilsson, Goran; Erlandsson, Rikard; Frisen, Jonas; Haegestr nd, Anders; Heidrich, Jessica; Hellstrom, Kristina; Haggblad, Johan; Jansson, Katarina; Kortessmaa, Jarkko; Lindquist, Per; Lundh, Hanna; McGuire, Jacqueline; Mercer, Alex; Njberg, Karl; Ossoinak, Amina; Patrone, Cesare; Ronnholm, Harriet; Zachrisson, Olof; Wikstrom, Lilian

PATENT ASSIGNEE(S): Neuronova AB, Swed.

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

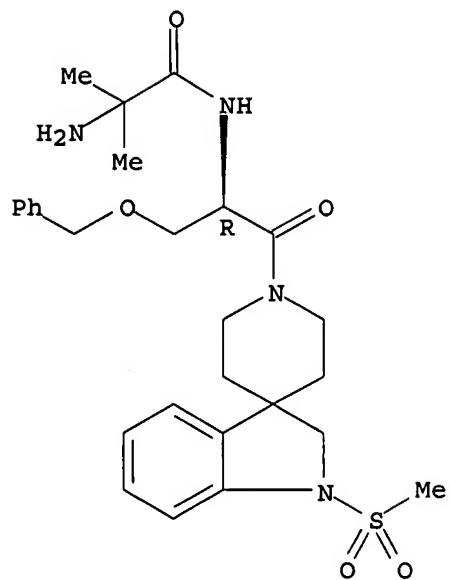
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

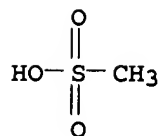
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004045592	A2	20040603	WO 2003-IB5311	20031120
WO 2004045592	A3	20041104		
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CA 2506850	A1	20040603	CA 2003-2506850	20031120
AU 2003280117	A1	20040615	AU 2003-280117	20031120
EP 1583541	A2	20051012	EP 2003-772495	20031120
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JP 2006514630	T	20060511	JP 2004-553032	20031120
CA 2546843	A1	20050909	CA 2004-2546843	20041119
WO 2005081619	A2	20050909	WO 2004-IB4451	20041119
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EP 1750752	A2	20070214	EP 2004-821493	20041119
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PRIORITY APPLN. INFO.:			US 2002-427912P	P 20021120
			US 2003-718071	A 20031120
			WO 2003-IB305311	A 20031120
			WO 2003-IB5311	W 20031120
			US 2004-850055	A 20040519
			WO 2004-IB4451	W 20041119
IT	159752-10-0, MK-677			
	RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cAMP-elevating and calcium ion-elevating compds. for increasing neurogenesis)			
RN	159752-10-0 HCAPLUS			
CN	Propanamide, 2-amino-N-[(1R)-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-methyl-, methanesulfonate (1:1) (CA INDEX NAME)			
CM	1			
CRN	159634-47-6			
CMF	C27 H36 N4 O5 S			

Absolute stereochemistry.

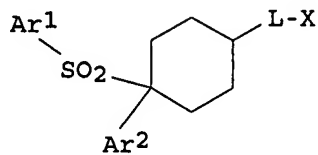


CM 2

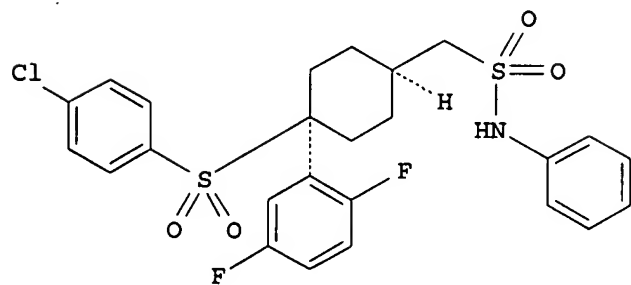
CRN 75-75-2  
CMF C H4 O3 S



L11 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN  
ED Entered STN: 15 Apr 2004  
GI



I



II

AB Aryl cyclohexyl sulfones (shown as I; variables defined below; e.g. II) inhibit the processing of APP by  $\gamma$ -secretase, and hence are useful in treatment of Alzheimer's disease. For I: X = SCN, SR1, S(O)R1, (CRaRb)mSO2R1, SO2N(R2)2, SO2NHCOR1, SO2NHN(R2)2, OSO2N(R2)2, OS(O)N(R2)2, OSO2NHCOR1, COR4, NHCOR1, NHCO2R1, NHCON(R2)2, NHSO2R1 or NHSO2N(R2)2; L = a bond, :CH- or -(CHRa)n- with provisos; n = 1-3; Ar1 and Ar2 = Ph or heteroaryl, either of which bears 0-3 halogen, CN, NO2, CF3, CHF2, OH, OCF3, CHO, CH:NOH, C1-4-alkoxy, C1-4-alkoxycarbonyl, C2-6-acyl, C2-6-alkenyl, and C1-4-alkyl; Ra = H, alkyl; Rb = H, alkyl, CO2H, alkoxycarbonyl, alkylsulfonyl; R1 = CF3, (substituted) alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl(alkyl), heterocyclyl(alkyl); R2 = H, (substituted) alkoxy, alkyl, alkenyl, cycloalkyl, cycloalkylalkyl; R3 = H, alkyl, Ph, heteroaryl; R4 = CRaRbSO2R1, pyridine N-oxide, substituted Ph, heteroaryl; addnl. details are given in the claims. Although the methods of preparation are not claimed, example preps. and/or characterization data are included for <180 examples of I and some intermediates. For example, II was prepared from excess aniline and [cis-4-(4-chlorobenzenesulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]methanesulfonyl chloride, which was prepared from SO2Cl2, KNO3 and [cis-4-(4-chlorobenzenesulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]methanethiol, which was prepared from in 2 steps from iodo[cis-4-(4-chlorobenzenesulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]methane, which was prepared photochem. from [cis-4-(4-Chlorophenylsulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]acetic acid, iodoisobenzene diacetate and I2. The examples all had an ED50 against  $\gamma$ -secretase of <1  $\mu$ M, typically <0.5  $\mu$ M, in most cases <100 nM, and in preferred cases <10 nM.

ACCESSION NUMBER: 2004:308409 HCAPLUS  
DOCUMENT NUMBER: 140:321108  
TITLE: Preparation of aryl cyclohexyl sulfones as  $\gamma$ -secretase inhibitors useful against Alzheimer's disease  
INVENTOR(S): Churcher, Ian; Harrison, Timothy; Kerrad, Sonia; Oakley, Paul Joseph; Shaw, Duncan Edward; Teall, Martin Richard; Williams, Susannah  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 78 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004031137	A1	20040415	WO 2003-GB4102	20030925
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2500964	A1	20040415	CA 2003-2500964	20030925
AU 2003267614	A1	20040423	AU 2003-267614	20030925
EP 1551797	A1	20050713	EP 2003-748306	20030925
EP 1551797	B1	20070221		
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006501292	T	20060112	JP 2004-540927	20030925
AT 354562	T	20070315	AT 2003-748306	20030925
US 2004122050	A1	20040624	US 2003-679557	20031006
US 7101895	B2	20060905		

PRIORITY APPLN. INFO.:

GB 2002-23039  
WO 2003-GB4102

A 20021004  
W 20030925

OTHER SOURCE(S): MARPAT 140:321108

IT 471903-69-2, [cis-4-(4-Chlorophenylsulfonyl)-4-(2,5-difluorophenyl)cyclohexyl]acetic acid

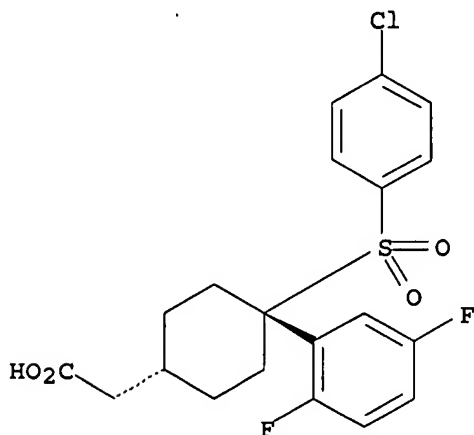
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of aryl cyclohexyl sulfones as  $\gamma$ -secretase inhibitors useful against Alzheimer's disease)

RN 471903-69-2 HCAPLUS

CN Cyclohexaneacetic acid, 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-difluorophenyl)-, cis- (CA INDEX NAME)

Relative stereochemistry.

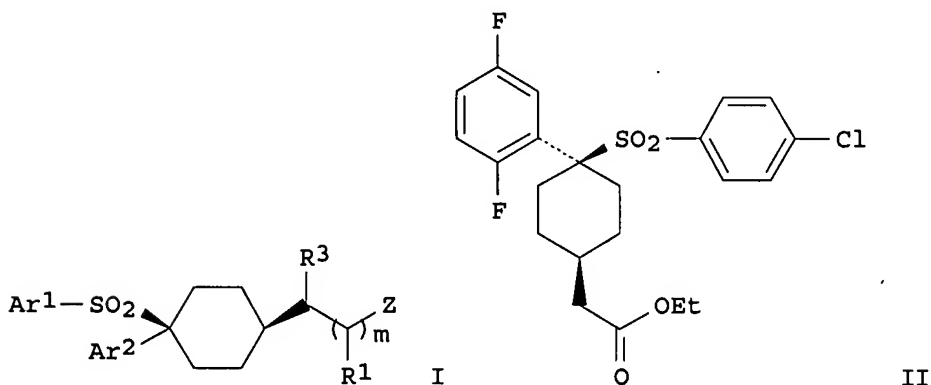


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

ED Entered STN: 07 Mar 2003

GI



AB Title sulfones I [wherein  $m = 0-1$ ;  $Z = \text{CN}$ ,  $\text{OR}_2$ ,  $\text{CO}_2\text{R}_2$ , or  $\text{CON}(\text{R}_2)_2$ ;  $\text{R}_1 = \text{H}$ , alkyl, or OH;  $\text{R}_2$  and  $\text{R}_4 =$  independently H or (un)substituted alkyl, cycloalkyl(alkyl), alkenyl, or (hetero)aryl; or  $\text{N}(\text{R}_2)_2$  or  $\text{N}(\text{R}_4)_2 =$  independently (un)substituted heterocyclyl;  $\text{R}_3 = \text{H}$  or alkyl; or pharmaceutically acceptable salts thereof] were prepared For example, oxidative coupling of 4-chlorothiophenol with 2,5-difluorobenzyl bromide gave 1-[(4-chlorophenyl)sulfonyl]methyl]-2,5-difluorobenzene. Reaction

with Me acrylate and KOBu in THF, followed by heating to 150° for 2 h in a solution of DMSO, NaCl, and H2O afforded 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-difluorophenyl)cyclohexanone. Condensation of the ketone with Et (diethoxyphosphinyl)acetate in the presence of NaH in THF provided the alkylidene derivative (88%), which was reduced with NaBH4 to give (cis)-II (36%). I modulate the processing of amyloid precursor protein by  $\gamma$ -secretase and hence are useful in the treatment or prevention of Alzheimer's disease (no data).

ACCESSION NUMBER: 2003:173575 HCAPLUS  
DOCUMENT NUMBER: 138:221350  
TITLE: Preparation of 1-phenyl-1-(arylsulfonyl)cyclohexanes for treatment of Alzheimer's disease  
INVENTOR(S): Churcher, Ian; Dinnell, Kevin; Harrison, Timothy; Kerrad, Sonia; Nadin, Alan John; Oakley, Paul Joseph; Shaw, Duncan Edward; Teall, Martin Richard; Williams, Brian John; Williams, Susannah  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 39 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003018543	A1	20030306	WO 2002-GB3806	20020816
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
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WO 2002081435	A1	20021017	WO 2001-GB3741	20010821
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CA 2456420	A1	20030306	CA 2002-2456420	20020816
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NO 2004001185	A	20040319	NO 2004-1185	20040319
PRIORITY APPLN. INFO.:			GB 2001-20347	A 20010821
			WO 2001-GB3741	W 20010821
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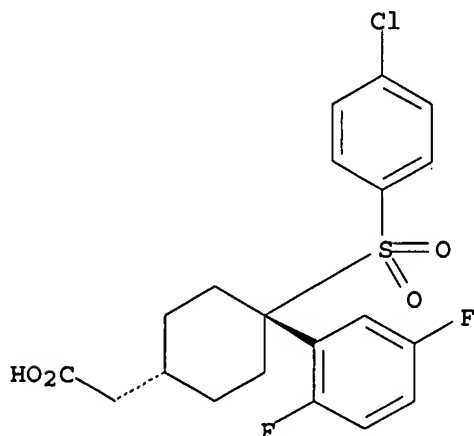
OTHER SOURCE(S): MARPAT 138:221350  
IT 471903-69-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(anti-Alzheimer's agent; preparation of phenylcyclohexyl aryl sulfones for treatment of Alzheimer's disease)

RN 471903-69-2 HCAPLUS

CN Cyclohexaneacetic acid, 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-difluorophenyl)-, cis- (CA INDEX NAME)

Relative stereochemistry.

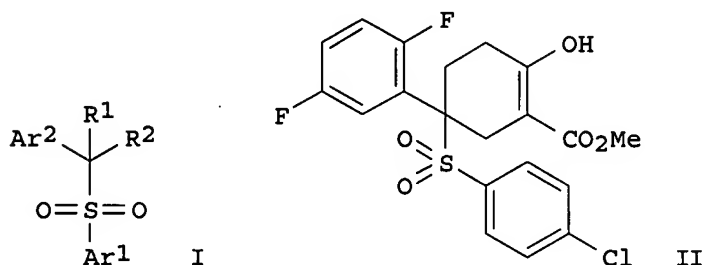


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

ED Entered STN: 18 Oct 2002

GI



AB Title compds. I [R1 and R2 together from a (un)substituted saturated or unsatd. ring of 4-7 atoms of which at most 2 are selected from N, O, and S with the remaining being C; Ar1 and Ar2 independently equal (un)substituted aryl or heteroaryl] and their pharmaceutically acceptable salts are disclosed as modulators of gamma secretase (no data). Thus, II was prepared via condensation of 4-chlorothiophenol with 2,5-difluorobenzyl bromide, oxidation of intermediate thioether and subsequent cyclization with Me acrylate. As modulators of the action of g-secretase, I are useful in the treatment or prevention of Alzheimer's disease.

ACCESSION NUMBER: 2002:793593 HCAPLUS

DOCUMENT NUMBER: 137:310695

TITLE: Preparation of aryl sulfones which modulate the action of gamma secretase

INVENTOR(S): Castro Pineiro, Jose Luis; Churcher, Ian; Dinnell, Kevin; Harrison, Timothy; Kerrad, Sonia; Nadin, Alan

John; Oakley, Paul Joseph; Owens, Andrew Pate; Shaw,  
Duncan Edward; Teall, Martin Richard; Williams, Brian  
John; Williams, Susannah  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 159 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002081435	A1	20021017	WO 2001-GB3741	20010821
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WO 2003018543	A1	20030306	WO 2002-GB3806	20020816
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PRIORITY APPLN. INFO.:				
GB 2001-8591				A 20010405
GB 2001-20347				A 20010821
WO 2001-GB3741				W 20010821
WO 2002-GB3806				W 20020816
US 2002-223993				A1 20020820

OTHER SOURCE(S): MARPAT 137:310695  
IT 471903-69-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

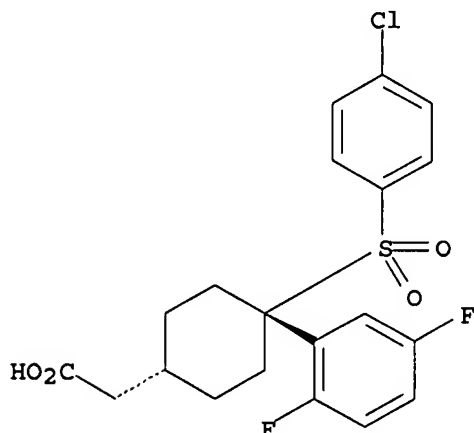


(Preparation); RACT (Reactant or reagent); USES (Uses)  
(drug candidate; preparation of aryl sulfones as modulators of gamma  
secretase useful for the treatment of Alzheimer's disease)

RN 471903-69-2 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(4-chlorophenyl)sulfonyl]-4-(2,5-  
difluorophenyl)-, cis- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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1340413 GROWTH

287715 HORMONE

89 SECRETOGOGUE

L12 1 GROWTH(W)HORMONE(W)SECRETOGOGUE

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COST IN U.S. DOLLARS

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

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ENTRY

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